## **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (Currently Amended) A compound having the formula:

or a pharmaceutically acceptable salt, or ester thereof, wherein

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wherein:

M is selected from the group consisting of:

(a) 
$$-C(O)$$
-, (b)  $-CH(-OR^{114})$ -, (c)  $-C(=NNR^{114}R^{114})$ -, (d)  $-C(=NR^{114})$ -, (e)  $-CR^{115}R^{115}$ -, and (f)  $-C(=NOR^{127})$ -, (g)  $-NR^{114}$ - $-CH_2$ -, (h)  $-CH_2$ - $-NR^{114}$ -, (i)  $-CH(NR^{114}R^{114})$ - (j)  $-NR^{114}$ - $-C(O)$ -, and (k)  $-C(O)NR^{114}$ -;

 $R^{100}$  is selected from the group consisting of H and  $C_{1\text{-}6}$  alkyl;

R<sup>101</sup> is selected from the group consisting of:

(a) H, (b) Cl, (c) F, (d) Br, (e) I, (f) 
$$-NR^{114}R^{114}$$
, (g)  $-NR^{114}C(O)R^{114}$ , (h)  $-OR^{114}$ ,

(i) 
$$-OC(O)R^{114}$$
, (j)  $-OC(O)OR^{114}$ , (k)  $-OC(O)NR^{114}R^{114}$ , (l)  $-O-C_{1-6}$  alkyl,

(m) 
$$-OC(O)-C_{1-6}$$
 alkyl, (n)  $-OC(O)O-C_{1-6}$  alkyl, (o)  $-OC(O)NR^{114}-C_{1-6}$  alkyl,

(p)  $C_{1\text{-}6}$  alkyl, (q)  $C_{1\text{-}6}$  alkenyl, (r)  $C_{1\text{-}6}$  alkynyl,

wherein any of (l) - (r) optionally is substituted with one or more  $R^{115}$  groups;

R<sup>102</sup> is H;

R<sup>103</sup> is selected from the group consisting of:

(a) H, (b) 
$$-OR^{114}$$
, (c)  $-O-C_{1-6}$  alkyl $-R^{115}$ , (d)  $-OC((O)R^{114}$ ,

(e) 
$$-OC(O)-C_{1-6}$$
 alkyl $-R^{115}$ , (f)  $-OC(O)OR^{114}$ , (g)  $-OC(O)O-C_{1-6}$  alkyl $-R^{115}$ ,

(h) 
$$-OC(O)NR^{114}R^{114}$$
, (i)  $-OC(O)NR^{114}$ – $C_{1-6}$  alkyl– $R^{115}$ , and

(i)

alternatively, R<sup>102</sup> and R<sup>103</sup> taken together form a carbonyl group;

alternatively,  $R^{101}$  and  $R^{103}$  taken together are a single bond between the respective carbons to which these two groups are attached thereby creating a double bond between the carbons to which  $R^{100}$  and  $R^{102}$  are attached;

alternatively, R<sup>101</sup> and R<sup>103</sup> taken together are an epoxide moiety.

R<sup>104</sup> is selected from the group consisting of:

$$\begin{array}{l} \text{(a) H, (b) } R^{114}\text{, (c)} - C(O)R^{114}\text{(d)} - C(O)OR^{114}\text{ (e)} - C(O)NR^{114}R^{114}\text{, (f)} - C_{1\text{-}6}\text{ alkyl} - \\ K - R^{114}\text{, (g)} - C_{2\text{-}6}\text{ alkenyl} - K - R^{114}\text{, and (h)} - C_{2\text{-}6}\text{ alkynyl} - K - R^{114}\text{;} \end{array}$$

alternatively R<sup>103</sup> and R<sup>104</sup>, taken together with the atoms to which they are bonded,

form:

K is selected from the group consisting of:

(a) 
$$-C(O)$$
, (b)  $-C(O)O$ , (c)  $-C(O)NR^{114}$ , (d)  $-C(=NR^{114})$ , (e)  $-C(=NR^{114})O$ ,

$$(f) - C(=NR^{114})NR^{114} -, (g) - OC(O) -, (h) - OC(O)O -, (i) - OC(O)NR^{114} -,$$

(j) 
$$-NR^{114}C(O)-$$
, (k)  $-NR^{114}C(O)O-$ , (l)  $-NR^{114}C(O)NR^{114}-$ ,

(m) 
$$-NR^{114}C(=NR^{114})NR^{114}$$
, and (o)  $-S(O)_p$ ;

R<sup>105</sup> is selected from the group consisting of:

(a) 
$$R^{114}$$
, (b)  $-OR^{114}$ , (c)  $-NR^{114}R^{114}$ , (d)  $-O-C_{1-6}$  alkyl $-R^{115}$ , (e)  $-C(O)-R^{114}$ ,

(f) 
$$-C(O)-C_{1-6}$$
 alkyl $-R^{115}$ , (g)  $-OC(O)-R^{114}$ , (h)  $-OC(O)-C_{1-6}$  alkyl $-R^{115}$ ,

(i) 
$$-OC(O)O-R^{114}$$
, (j)  $-OC(O)O-C_{1-6}$  alkyl $-R^{115}$ , (k)  $-OC(O)NR^{114}R^{114}$ ,

(l) 
$$-OC(O)NR^{114}-C_{1-6}$$
 alkyl $-R^{115}$ , (m)  $-C(O)-C_{2-6}$  alkenyl $-R^{115}$ , and

(n) 
$$-C(O)-C_{2-6}$$
 alkynyl $-R^{115}$ ;

alternatively,  $R^{104}$  and  $R^{105}$ , taken together with the atoms to which they are bonded, form:

wherein

Q is CH or N, and R<sup>126</sup> is -OR<sup>114</sup>, -NR<sup>114</sup> or R<sup>114</sup>;

alternatively,  $R^{104}$  and  $R^{105}$ , taken together with the atoms to which they are bonded, form:

wherein

- i) R<sup>101</sup> is as defined above;
- ii) alternately, R<sup>101</sup> and R<sup>109</sup> may be taken together form a carbonyl group;
- iii) alternately, R<sup>101</sup> and R<sup>109</sup> may be taken together to form the group -O(CR<sup>116</sup>R<sup>116</sup>)<sub>u</sub>O-;

alternatively, R<sup>104</sup> and R<sup>105</sup>, taken together with the atoms to which they are bonded,

Application No.: 10/590,782

5

form:

- i)  $R^{130}$  is -OH, =C(O), or  $R^{114}$ ,
- ii)  $R^{131}$  is -OH, =C(O), or  $R^{114}$ .
- iii) alternately, R<sup>130</sup> and R<sup>131</sup> together with the carbons to which they are attached form a 3-7 membered saturated, unsaturated or aromatic carbocyclic or heterocyclic ring which can optionally be substituted with one or more R<sup>114</sup> groups;

R<sup>106</sup> is selected from the group consisting of:

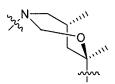
(a) 
$$-OR^{114}$$
, (b)  $-C_{1-6}$  alkoxy $-R^{115}$ , (c)  $-C(O)R^{114}$ , (d)  $-OC(O)R^{114}$ , (e)  $-OC(O)OR^{114}$ , (f)  $-OC(O)NR^{114}R^{114}$ , and (g)  $-NR^{114}R^{114}$ ,

alternatively, R<sup>105</sup> and R<sup>106</sup> taken together with the atoms to which they are attached form a 5-membered ring by attachment to each other through a chemical moiety selected from the group consisting of:

(a) 
$$-OC(R^{115})_2O$$
, (b)  $-OC(O)O$ , (c)  $-OC(O)NR^{114}$ , (d)  $-NR^{114}C(O)O$ , (e)  $-OC(O)NOR^{114}$ , (f)  $-NOR^{114}$ , (c)  $-OC(O)NNR^{114}R^{114}$ , (h)  $-NNR^{114}R^{114}$ , (i)  $-OC(O)C(R^{115})_2$ , (j)  $-C(R^{115})_2C(O)O$ , (k)  $-OC(S)O$ , (l)  $-OC((S)NR^{114}$ , (m)  $-NR^{114}C(S)O$ , (n)  $-OC(S)NOR^{114}$ , (o)  $-NOR^{114}$ , (q)  $-NNR^{114}R^{114}$ , (q)  $-NNR^{114}R^{114}$ , (q)  $-NNR^{114}R^{114}$ , (q)  $-NNR^{114}R^{114}$ , (q)  $-OC(S)C(R^{115})_2$ , and (s)  $-C(R^{115})_2C(S)O$ ,

alternatively, M, R<sup>105</sup>, and R<sup>106</sup> taken together with the atoms to which they are attached form:

wherein J is selected from the group consisting of O, S and  $NR^{114}$ ; alternatively, M and  $R^{104}$  taken together with the atoms to which they are attached form:



R<sup>107</sup> is selected from the group consisting of

(a) H, (b)  $-C_{1-4}$  alkyl, (c)  $-C_{2-4}$  alkenyl, which can be further substituted with  $C_{1-12}$  alkyl or one or more halogens, (d)  $-C_{2-4}$  alkynyl, which can be further substituted with  $C_{1-12}$  alkyl or one or more halogens, (e) aryl or heteroaryl, which can be further substituted with  $C_{1-12}$  alkyl or one or more halogens, (f) -C(O)H, (g) -C(O)H, (h) -C(O)H, (i)  $-C(O)H^{114}$ , (j)  $-C(O)H^{114}H^{114}$ , (k)  $-C(O)H^{114}$ , and (l)  $-C(O)SR^{114}$ , wherein (b) is further substituted with one or more substituents selected from the group consisting of (aa)  $-OR^{114}$ , (bb) halogen, (cc)  $-SR^{114}$ , (dd)  $-C_{1-12}$  alkyl, which can be further substituted with halogen, hydroxyl,  $-C_{1-6}$  alkoxy, or amino, (ee)  $-OR^{114}$ , (ff)  $-SR^{114}$ , (gg)  $-NR^{114}H^{114}$ , (hh) -CN, (ii)  $-NO_2$ , (jj)  $-NC(O)R^{114}$ , (kk)  $-COOR^{114}$ , (ll)  $-N_3$ , (mm)  $-N-O-R^{114}$ , (nn)  $-NR^{114}H^{114}$ , (oo)  $-NR^{114}H^{114}$ , (pp)  $-NH-C(O)R^{114}$ , and (qq)  $-N-NH-C(O)NR^{114}H^{114}$ ;

alternatively  $R^{106}$  and  $R^{107}$  are taken together with the atom to which they are attached to form an epoxide, a carbonyl, an olefin, or a substituted olefin, or a  $C_3$ - $C_7$  carbocyclic, carbonate, or carbamate, wherein the nitrogen of said carbamate can be further substituted with a  $C_1$ - $C_6$  alkyl;

R<sup>108</sup> is selected from the group consisting of:

(a) C<sub>1-6</sub> alkyl, (b) C<sub>2-6</sub> alkenyl, and (c) C<sub>2-6</sub> alkynyl,
wherein any of (a)–(c) optionally is substituted with one or more R<sup>114</sup>
groups;

R<sup>111</sup> is selected from the group consisting of H and –C(O)R<sup>114</sup>;

R<sup>112</sup> is selected from the group consisting of H, OH, and OR<sup>114</sup>;

R<sup>113</sup> is selected from the group consisting of:

(a) H, (b)  $R^{114}$ , (c)  $-C_{1-6}$  alkyl- $K-R^{114}$ , (d)  $-C_{2-6}$  alkenyl- $K-R^{114}$ , and

(e)  $-C_{2-6}$  alkynyl $-K-R^{114}$ ,

wherein any of (c)-(e) optionally is substituted with one or more R<sup>115</sup> groups;

Docket No.: 26505-514 NATLUS

R<sup>114</sup>, at each occurrence, independently is selected from the group consisting of:

(a) H, (b)  $C_{1-6}$  alkyl, (c)  $C_{2-6}$  alkenyl, (d)  $C_{2-6}$  alkynyl, (e)  $C_{6-10}$  saturated, unsaturated, or aromatic carbocycle, (f) 3-12 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, (g)  $-C(O)-C_{1-6}$  alkyl, (h)  $-C(O)-C_{2-6}$  alkenyl, (i)  $-C(O)-C_{2-6}$  alkynyl, (j)  $-C(O)-C_{6-10}$  saturated, unsaturated, or aromatic carbocycle, (k) -C(O)-3-12 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, (l)  $-C(O)O-C_{1-6}$  alkyl, (m)  $-C(O)O-C_{2-6}$  alkenyl, (n)  $-C(O)O-C_{2-6}$  alkynyl, (o)  $-C(O)O-C_{6-10}$  saturated, unsaturated, or aromatic carbocycle, (p) -C(O)O-3-12 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, and (q)  $-C(O)NR^{116}R^{116}$ ,

wherein any of (b)–(p) optionally is substituted with one or more R<sup>115</sup> groups, wherein one or more non-terminal carbon moieties of any of (b)–(d) optionally is replaced with oxygen, S(O)<sub>p</sub>, or –NR<sup>116</sup>,

alternatively,  $NR^{114}R^{114}$  forms a 3-7 membered saturated, unsaturated or aromatic ring including the nitrogen atom to which the  $R^{114}$  groups are bonded and optionally one or more moieties selected from the group consisting of O,  $S(O)_p$ , N, and  $NR^{118}$ ;

 $R^{115}$  is selected from the group consisting of:

(a) R<sup>117</sup>, (b) C<sub>1-8</sub> alkyl, (c) C<sub>2-8</sub> alkenyl, (d) C<sub>2-8</sub> alkynyl, (e) C<sub>3-12</sub> saturated, unsaturated, or aromatic carbocycle, (f) 3-12 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein any of (b)–(f) optionally is substituted with one or more R<sup>117</sup> groups;

R<sup>116</sup>, at each occurrence, independently is selected from the group consisting of:

(a) H, (b) C<sub>1-6</sub> alkyl, (c) C<sub>2-6</sub> alkenyl, (d) C<sub>2-6</sub> alkynyl, (e) C<sub>3-10</sub> saturated, unsaturated, or aromatic carbocycle, and (f) 3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein one or more non-terminal carbon moieties of any of (b)–(d) optionally is replaced with oxygen, S(O)<sub>p</sub>, or –NR<sup>114</sup>, wherein any of (b)–(f) optionally is substituted with one or more moieties selected from the group consisting of:

(aa) carbonyl, (bb) formyl, (cc) F, (dd) Cl, (ee) Br, (ff) I, (gg) CN, (hh)  $N_3$ , (ii)  $NO_2$  (ii)  $OR^{118}$ , (kk)  $-S(O)_nR^{118}$ , (ll)  $-C(O)R^{118}$ , (mm)  $-C(O)OR^{118}$ , (nn)  $-OC(O)R^{118}$ , (oo)  $-C(O)NR^{118}R^{118}$ , (pp) - $OC(O)NR^{118}R^{118}$ , (qq)  $-C(=NR^{118})R^{118}$ , (rr)  $-C(R^{118})(R^{118})OR^{118}$ ,  $(ss) - C(R^{118})_2 OC(O)R^{118}$ ,  $(tt) - C(R^{118})(OR^{118})(CH_2)_t NR^{118}R^{118}$ , (uu)  $-NR^{118}R^{118}$ ; (vv)  $-NR^{118}OR^{118}$ , (ww)  $-NR^{118}C(O)R^{118}$ , (xx) - $NR^{118}C(O)OR^{118}$ , (yy)  $-NR^{118}C(O)NR^{118}R^{118}$ , (zz) - $NR^{118}S(O)_rR^{118}$ , (ab)  $-C(OR^{118})(OR^{118})R^{118}$ , (ac) - $C(R^{118})_2NR^{118}R^{118}$ , (ad) =  $NR^{118}$ , (ae) -  $C(S)NR^{118}R^{118}$ , (af) - $NR^{118}C(S)R^{118}$ , (ag)  $-OC(S)NR^{118}R^{118}$ , (ah)  $-NR^{118}C(S)OR^{118}$ , (ai)  $-NR^{118}C(S)NR^{118}R^{118}$ , (aj)  $-SC(O)R^{118}$ , (ak)  $C_{1-8}$  alkyl, (al)  $C_{2-8}$  alkenyl, (am)  $C_{2-8}$  alkynyl, (an)  $C_{1-8}$  alkoxy, (ao)  $C_{1-8}$ alkylthio, (ap) C<sub>1-8</sub> acyl, (aq) saturated, unsaturated, or aromatic  $C_{3-10}$  carbocycle, and (ar) saturated, unsaturated, or aromatic 3-10 membered heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

alternatively,  $NR^{116}R^{116}$  forms a 3-10 membered saturated, unsaturated or aromatic ring including the nitrogen atom to which the  $R^{116}$  groups are attached and optionally one or more moieties selected from the group consisting of O,  $S(O)_p$ , N, and  $NR^{118}$ ;

alternatively, CR<sup>116</sup>R<sup>116</sup> forms a carbonyl group;

R<sup>117</sup>, at each occurrence, is selected from the group consisting of:

- (a) H, (b) =O, (c) F, (d) Cl, (e) Br, (f) I, (g)  $(CR^{116}R^{116})_rCF_3$ , (h)  $(CR^{116}R^{116})_rCN$ ,
- (i)  $(CR^{116}R^{116})_tNO2$ , (j)  $(CR^{116}R^{116})_tNR^{116}(CR^{116}R^{116})_tR^{119}$ , (k)  $(CR^{116}R^{116})_tOR^{119}$ ,
- $(l) (CR^{116}R^{116})_rS(O)_p(CR^{116}R^{116})_tR^{119}, (m) (CR^{116}R^{116})_rC(O)(CR^{116}R^{116})_tR^{119}, (m) (CR^{116}R^{116})_tR^{119}, (m) (CR^{116}R^{116}R^{116})_tR^{119}, (m) (CR^{116}R^{116}R^{116})_tR^{119}, (m) (CR^{116}R^{116}R^{116}R^{116}R^{116}, (m) (CR^{116}R^{116}R^{116}R^{116}, (m) (CR^{116}R^$
- (n)  $(CR^{116}R^{116})_rOC(O)(CR^{116}R^{116})_tR^{119}$ , (o)  $(CR^{116}R^{116})_rSC(O)(CR^{116}R^{116})_tR^{119}$ ,
- $(p) \ (CR^{116}R^{116})_r C(O) O (CR^{116}R^{116})_t R^{119}, \\ (q) \ (CR^{116}R^{116})_r NR^{116} C(O) (R^{116}R^{116})_t R^{116}, \\ (q) \ (R^{116}R^{116})_r NR^{116} C(O) (R^{116}R^{116})_t R^{116}, \\ (q) \ (R^{116}R^{116}R^{116})_r NR^{116} R^{116}, \\ (q) \ (R^{116}R^{116})_r NR^{116}R^{116}, \\ (q) \ (R^{116}R^{116})_r NR^{116}, \\ (q) \ (R^{116}R^{116}R^{116})_r NR^{116}, \\ (q) \ (R^{116}R^{116})_r NR^{116}, \\ (q) \ (R^{116}R^{116$
- $CR^{116}R^{116})_tR^{119}$ , (r)  $(CR^{116}R^{116})_tC(O)NR^{116}(CR^{116}R^{116})_tR^{119}$ , (s)

 $(CR^{116}R^{116})_{r}C(=NR^{116})(CR^{116}R^{116})_{t}R^{119},$ 

- (t)  $(CR^{116}R^{116})_rC(=NNR^{116}R^{116})(CR^{116}R^{116})_tR^{119}$
- (u)  $(CR^{116}R^{116})_tC(=NNR^{116}C(O)R^{116})(CR^{116}R^{116})_tR^{119}$
- (v)  $(CR^{116}R^{116})_rC(=NOR^{119})(CR^{116}R^{116})_tR^{119}$ ,
- (w)  $(CR^{116}R^{116})_tNR^{116}C(O)O(CR^{116}R^{116})_tR^{119}$ ,
- (x)  $(CR^{116}R^{116})_tOC(O)NR^{116}(CR^{116}R^{116})_tR^{119}$ ,
- (y)  $(CR^{116}R^{116})_{t}NR^{116}C(O)NR^{116}(CR^{116}R^{116})_{t}R^{119}$
- (z)  $(CR^{116}R^{116})_tNR^{116}S(O)_p(CR^{116}R^{116})_tR^{119}$
- (aa)  $(CR^{116}R^{116})_rS(O)_pNR^{116}(CR^{116}R^{116})_tR^{119}$ ,
- (bb)  $(CR^{116}R^{116})_rNR^{116}S(O)_pNR^{116}(CR^{116}R^{116})_tR^{119}$ , (cc)  $(CR^{116}R^{116})_rNR^{116}R^{116}$ ,
- (dd) C<sub>1-6</sub> alkyl, (ee) C<sub>2-6</sub> alkenyl, (ff) C<sub>2-6</sub> alkynyl, (gg) (CR<sup>116</sup>R<sup>116</sup>)<sub>r</sub>—C<sub>3-10</sub> saturated, unsaturated, or aromatic carbocycle, and (hh) (CR<sup>116</sup>R<sup>116</sup>)<sub>r</sub>—3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more

heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein any of (dd)–(hh) optionally is substituted with one or more R<sup>119</sup> groups;

alternatively, two  $R^{117}$  groups may form  $-O(CH_2)_uO$ -;  $R^{118}$  is selected from the group consisting of:

(a) H, (b)  $C_{1-6}$  alkyl, (c)  $C_{2-6}$  alkenyl, (d)  $C_{2-6}$  alkynyl, (e)  $C_{3-10}$  saturated, unsaturated, or aromatic carbocycle, (f) 3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, (g)  $-C(O)-C_{1-6}$  alkyl, (h)  $-C(O)-C_{1-6}$  alkenyl, (g)  $-C(O)-C_{1-6}$  alkynyl, (i)  $-C(O)-C_{3-10}$  saturated, unsaturated, or aromatic carbocycle, and (j) -C(O)-3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein any of (b)–(j) optionally is substituted with one or more moieties selected from the group consisting of : (aa) H, (bb) F, (cc) Cl, (dd) Br, (ee) I, (ff) CN, (gg) NO<sub>2</sub>, (hh) OH, (ii) NH<sub>2</sub>, (jj) NH(C<sub>1-6</sub> alky(l), (kk) N(C<sub>1-6</sub> alky(l)<sub>2</sub>, (ll) C<sub>1-6</sub> alkoxy, (mm) aryl, (nn) substituted aryl, (oo) heteroaryl, (pp) substituted heteroaryl, and (qq) C<sub>1-6</sub> alkyl, optionally

substituted with one or more moieties selected from the group consisting of aryl, substituted aryl, heteroaryl, substituted heteroaryl, F, Cl, Br, I, CN, NO<sub>2</sub>, and OH;

R<sup>119</sup>, at each occurrence, independently is selected from the group consisting of:

(a) R<sup>120</sup>, (b) C<sub>1-6</sub> alkyl, (c) C<sub>2-6</sub> alkenyl, (d) C<sub>2-6</sub> alkynyl, (e) C<sub>3-10</sub> saturated, unsaturated, or aromatic carbocycle, and (f) 3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein any of (b)–(f) optionally is substituted with one or more R<sup>119</sup> groups;

R<sup>120</sup>, at each occurrence, independently is selected from the group consisting of:

- (a) H, (b) =O, (c) F, (d) Cl, (e) Br, (f) I, (g)  $(CR^{116}R^{116})_rCF_3$ , (h)  $(CR^{116}R^{116})_rCN$ ,
- (i)  $(CR^{116}R^{116})_rNO_2$ , (j)  $(CR^{116}R^{116})_rNR^{116}R^{116}$ , (k)  $(CR^{116}R^{116})_rOR^{114}$ ,
- $\text{(l) } (CR^{116}R^{116})_rS(O)_pR^{116}, \\ \text{(m) } (CR^{116}R^{116})_rC(O)R^{116}, \\ \text{(n) } (CR^{116}R^{116})_rC(O)OR^{116}, \\ \text{(n) } (CR^{116}R^{116$
- (o)  $(CR^{116}R^{116})_rOC(O)R^{116}$ , (p)  $(CR^{116}R^{116})_rNR^{116}C(O)R^{116}$ ,
- (q)  $(CR^{116}R^{116})_rC(O)NR^{116}R^{116}$ , (r)  $(CR^{116}R^{116})_rC(=NR^{116})R^{116}$ ,
- (s)  $(CR^{116}R^{116})_rNR^{116}C(O)NR^{116}R^{116}$ , (t)  $(CR^{116}R^{116})_rNR^{116}S(O)_pR^{116}$ ,
- $\text{(u)} \ (CR^{116}R^{116})_r S(O)_p NR^{116}R^{116}, \ (v) \ (CR^{116}R^{116})_r NR^{116}S(O)_p NR^{116}R^{116},$
- (w)  $C_{1-6}$  alkyl, (x)  $C_{2-6}$  alkenyl, (y)  $C_{2-6}$  alkynyl, (z)  $(CR^{116}R^{116})_T$ – $C_{3-10}$  saturated, unsaturated, or aromatic carbocycle, and (aa)  $(CR^{116}R^{116})_T$ –3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein any of (w)–(aa) optionally is substituted with one or more moieties selected from the group consisting of  $R^{116}$ , F, Cl, Br, I, CN, NO<sub>2</sub>,  $-OR^{116}$ ,  $-NH_2$ ,  $-NH(C_{1-6}$  alkyl),  $-N(C_{1-6}$  alkyl)<sub>2</sub>,  $C_{1-6}$  alkoxy,  $C_{1-6}$  alkylthio, and  $C_{1-6}$  acyl;

R<sup>121</sup>, at each occurrence, independently is selected from the group consisting of:

- (a) H, (b)  $-OR^{118}$ , (c)  $-O-C_{1-6}$  alkyl $-OC(O)R^{118}$ , (d)  $-O-C_{1-6}$  alkyl $-OC(O)OR^{118}$ ,
- (e)  $-O-C_{1-6}$  alkyl $-OC(O)NR^{118}R^{118}$ , (f)  $-O-C_{1-6}$  alkyl $-C(O)NR^{118}R^{118}$ , (g)  $-O-C_{1-6}$  alkyl $-NR^{118}C(O)R^{118}$ , (h)  $-O-C_{1-6}$  alkyl $-NR^{118}C(O)OR^{118}$ , (i)  $-O-C_{1-6}$  alkyl $-C_{1-6}$

$$\begin{split} NR^{118}C(O)NR^{118}R^{118}, (j) - O - C_{1\text{-}6} & \text{alkyl-NR}^{118}C(=N(H)NR^{118}R^{118}, (k) - O - C_{1\text{-}6} & \text{alkyl-S}(O)_pR^{118}, (l) - O - C_{2\text{-}6} & \text{alkenyl-OC}(O)R^{118}, (m) - O - C_{2\text{-}6} & \text{alkenyl-OC}(O)R^{118}, (m) - O - C_{2\text{-}6} & \text{alkenyl-OC}(O)NR^{118}R^{118}, (o) - O - C_{2\text{-}6} & \text{alkenyl-CO}(O)NR^{118}R^{118}, (o) - O - C_{2\text{-}6} & \text{alkenyl-NR}^{118}C(O)R^{118}, (q) - O - C_{2\text{-}6} & \text{alkenyl-NR}^{118}C(O)R^{118}, (q) - O - C_{2\text{-}6} & \text{alkenyl-NR}^{118}C(O)R^{118}R^{118}, (s) - O - C_{2\text{-}6} & \text{alkenyl-NR}^{118}C(O)R^{118}R^{118}R^{118}, (s) - O - C_{2\text{-}6} & \text{alkenyl-NR}^{118}C(O)R^{118}R^{118}R^{118}, (s) - O - C_{2\text{-}6}$$

- (u)  $-O-C_{2-6}$  alkynyl $-OC(O)R^{118}$ , (v)  $-O-C_{2-6}$  alkynyl $-OC(O)OR^{118}$ ,
- (w)  $-O-C_{2-6}$  alkynyl $-OC(O)NR^{118}R^{118}$ , (x)  $-O-C_{2-6}$  alkynyl $-C(O)NR^{118}R^{118}$ , (y)  $-O-C_{2-6}$  alkynyl $-NR^{118}C(O)R^{118}$ , (z)  $-O-C_{2-6}$  alkynyl $-NR^{118}C(O)NR^{118}R^{118}$ , (aa)  $-O-C_{2-6}$  alkynyl $-NR^{118}C(O)NR^{118}R^{118}$ ,
- (bb)  $-O-C_{2-6}$  alkynyl $-NR^{118}C(=N(H)NR^{118}R^{118}, (cc) -O-C_{2-6}$  alkynyl $-S(O)_pR^{118};$  and (dd)  $-NR^{118}R^{118};$

alternatively, two  $R^{121}$  groups taken together form =0, =NOR<sup>118</sup>, or =NNR<sup>118</sup>R<sup>118</sup>;  $R^{122}$  is  $R^{115}$ ;

R<sup>123</sup> is selected from the group consisting of:

(a)  $R^{116}$ , (b) F, (c) Cl, (d) Br, (e) I, (f) CN, (g) NO<sub>2</sub>, and (h)  $-OR^{114}$ ; alternatively,  $R^{122}$  and  $R^{123}$  taken together are  $-O(CH_2)_uO-$ ;

R<sup>124</sup>, at each occurrence, independently is selected from the group consisting of:

$$\begin{array}{l} \mbox{(a) H, (b) F, (c) Cl, (d) Br, (e) I, (f) CN, (g) - OR^{114}, (h) - NO_2, (i) - NR^{114}R^{114}, (j) \\ \mbox{$C_{1-6}$ alkyl, (k) $C_{1-6}$ acyl, and (l) $C_{1-6}$ alkoxy;} \end{array}$$

R<sup>125</sup> is selected from the group consisting of:

- (a)  $C_{1-6}$  alkyl, (b)  $C_{2-6}$  alkenyl, (c)  $C_{2-6}$  alkynyl, (d)  $C_{1-6}$  acyl, (e)  $C_{1-6}$  alkoxy,
- (f)  $C_{1\text{--}6}$  alkylthio, (g) saturated, unsaturated, or aromatic  $C_{5\text{--}10}$  carbocycle,
- (h) saturated, unsaturated, or aromatic 5-10 membered heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, (i)  $-O-C_{1-6}$  alkyl-saturated, unsaturated, or aromatic 5-10 membered heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, (j)  $-NR^{114}-C_{1-6}$  alkyl-saturated, unsaturated, or aromatic 5-10 membered heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, (k) saturated, unsaturated, or aromatic 10-membered bicyclic ring system

optionally containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, (l) saturated, unsaturated, or aromatic 13-membered tricyclic ring system optionally containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, (m)  $-OR^{114}$ , (n)  $-NR^{114}R^{114}$ , (o)  $-S(O)_pR^{114}$ , and (p)  $-R^{124}$ ,

wherein any of (a)-(l) optionally is substituted with one or more R<sup>115</sup> groups;

alternatively,  $R^{125}$  and one  $R^{124}$  group, taken together with the atoms to which they are bonded, form a 5-7 membered saturated or unsaturated carbocycle, optionally substituted with one or more  $R^{115}$  groups; or a 5-7 membered saturated or unsaturated heterocycle containing one or more atoms selected from the group consisting of nitrogen, oxygen, and sulfur, and optionally substituted with one or more  $R^{115}$  groups;

R<sup>126</sup> at each occurrence, independently is selected from the group consisting of:

- (a) hydrogen, (b) an electron-withdrawing group, (c) aryl, (d) substituted aryl,
- (e) heteroaryl, (f) substituted heteroaryl, and (g)  $C_{1-6}$  alkyl, optionally substituted with one or more  $R^{115}$  groups;

alternatively, any  $R^{126}$  and any  $R^{123}$ , taken together with the atoms to which they are bonded, form a 5-7 membered saturated or unsaturated carbocycle, optionally substituted with one or more  $R^{115}$  groups; or a 5-7 membered saturated or unsaturated heterocycle containing one or more atoms selected from the group consisting of nitrogen, oxygen, and sulfur, and optionally substituted with one or more  $R^{115}$  groups;

R<sup>109</sup> is H or F;

R<sup>127</sup> is R<sup>114</sup>, a monosaccharide or disaccharide (including amino sugars and halo sugar(s),

 $-(CH_2)_n-(O-CH_2CH_2-)_m-O(CH_2)_pCH_3$  or  $-(CH_2)_n-(O-CH_2CH_2-)_m-OH$ 

R<sup>128</sup> is R<sup>114</sup>

 $R^{129}$  is  $R^{114}$ 

 $R^{110}$  is  $R^{114}$ 

Alternatively, R<sup>109</sup> and R<sup>110</sup> taken together with the carbons to which they are attached form:

Docket No.: 26505-514 NATLUS

Alternately, R<sup>128</sup> and R<sup>129</sup> together with the carbons to which they are attached form a 3-6 membered saturated, unsaturated or aromatic carbocyclic or heterocyclic ring which may optionally be substituted with one or more R<sup>114</sup> groups;

m, at each occurrence is 0, 1, 2, 3, 4, or 5; n, at each occurrence is 1, 2, or 3;

[[;]]

 $R^{1}$  and  $R^{3}$  independently are selected from the group consisting of: (a) H, (b) a  $C_{1-6}$  alkyl group, (c) a  $C_{2-6}$  alkenyl group, (d) a  $C_{2-6}$  alkynyl group, (e)  $-C(O)R^{5}$ , (f)  $-C(O)OR^{5}$ , (g)  $-C(O)-NR^{4}R^{4}R^{4}R^{4}$ , (h)  $-C(S)R^{5}$ , (i)  $-C(S)OR^{5}$ , (j)  $-C(O)SR^{5}$ , or (k)  $-C(S)-NR^{4}R^{4}R^{4}R^{4}$ ;

R<sup>2</sup> is hydrogen or –OR<sup>12</sup>;

D is a  $C_{1-6}$  alkyl group;

F is selected from the group consisting of:

- (a) a single bond, (b) a  $C_{1-6}$  alkyl group, (c) a  $C_{2-6}$  alkenyl group, (d) a  $C_{2-6}$  alkynyl group, wherein
  - i) 0-2 carbon atoms in any of (b)–(d) of F immediately above optionally is replaced by a moiety selected from the group consisting of O, S(O)<sub>p</sub>, and NR<sup>4</sup>,
  - ii) any of (b)–(d) of F immediately above optionally is substituted with one or more  $R^5$  groups, and
  - iii) any of (b)–(d) of F immediately above optionally is substituted with  $C_{1-6}$  alkyl- $R^5$  groups;

E is 1,2,3-thiazoyltriazolyl wherein

said 1,2,3-triazo<u>l</u>yl immediately above optionally is substituted with one or more  $R^5$  groups;

G is selected from the group consisting of: (a) B' and (b) B'-Z-B", wherein

- i) each B' and B" is independently selected from the group consisting of (aa) an aryl group, (bb) a heteroaryl group, (cc) a biaryl group, (dd) a fused bicyclic or tricyclic saturated, unsaturated or aromatic ring system optionally containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, (ee) a 3-10 membered saturated or unsaturated heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, (ff) a 3-10 membered saturated, or unsaturated carbocycle, wherein each (aa)-(ff) optionally is substituted with one or more R<sup>11</sup> groups; and
- ii) Z is selected from the group consisting of (aa) a single bond, (bb) a  $C_{1-2}$  alkyl group, (cc) a  $C_2$  alkenyl group, (dd) a  $C_2$  alkynyl group, (ee) -C(O)–, (ff) -C(O)O–, (gg) -C(O)NR<sup>4</sup>–, (hh)  $-C(=NR^4)$ –, (ii)  $-C(=NR^4)$ O–, (jj)  $-C(=NR^4)$ NR<sup>4</sup>–, (kk)  $-S(O)_p$ –, (ll) -OC(O)–, (mm) -C(S)–, (nn) -C(S)NR<sup>4</sup>–, (oo)  $-C(NR^4)$ S–, (pp) -C(O)S–, (qq) -O–, (rr)  $-NR^4$ –, (ss)  $-NR^4$ C(O)–, (tt)  $-OC(NR^4)$ –, (uu)  $-NC(NR^4)$ –, (vv) -C(S)O–, (ww) -SC(O)–, or (xx) -OC(S)–;

R<sup>4</sup>, at each occurrence, independently is selected from the group consisting of:

(a) H, (b) a C<sub>1-6</sub> alkyl group, (c) a C<sub>2-6</sub> alkenyl group, (d) a C<sub>2-6</sub> alkynyl group, (e) a C<sub>6-10</sub> saturated, unsaturated, or aromatic carbocycle, (f) a 3-12 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, (g) –C(O)–C<sub>1-6</sub> alkyl, (h) –C(O)–C<sub>2-6</sub> alkenyl, (i) –C(O)–C<sub>2-6</sub> alkynyl, (j) –C(O)–C<sub>6-10</sub> saturated, unsaturated, or aromatic carbocycle, (k) –C(O)–3-12 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, (l) –C(O)O–C<sub>1-6</sub> alkyl, (m) –C(O)O–C<sub>2-6</sub> alkenyl, (n) –C(O)O–C<sub>2-6</sub> alkynyl, (o) –C(O)O–C<sub>6-10</sub> saturated, unsaturated, or aromatic carbocycle, p) –C(O)O–3-12 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

and q)  $-C(O)NR^6R^6$ ,

wherein any of (b)–(p) optionally is substituted with one or more R<sup>5</sup> groups,

alternatively, NR<sup>4</sup>R<sup>4</sup> forms a 3-7 membered saturated, unsaturated or aromatic ring including the nitrogen atom to which the R<sup>4</sup> groups are bonded, wherein said ring is optionally substituted at a position other than the nitrogen atom to which the R<sup>4</sup> groups are bonded, with one or more moieties selected from the group consisting of O, S(O)<sub>p</sub>, N, and NR<sup>8</sup>;

R<sup>5</sup> is selected from the group consisting of:

(a) R<sup>7</sup>, (b) a C<sub>1-8</sub> alkyl group, (c) a C<sub>2-8</sub> alkenyl group, (d) a C<sub>2-8</sub> alkynyl group, (e) a C<sub>3-12</sub> saturated, unsaturated, or aromatic carbocycle, and (f) a 3-12 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, or two R<sup>5</sup> groups, when present on the same carbon atom can be taken together with the carbon atom to which they are attached to form a spiro 3-6 membered carbocyclic ring or heterocyclic ring containing one or more heteroatoms selected form the group consisting of nitrogen, oxygen, and sulfur;

wherein any of (b)–(f) immediately above optionally is substituted with one or more R<sup>7</sup> groups;

R<sup>6</sup>, at each occurrence, independently is selected from the group consisting of:

(a) H, (b) a C<sub>1-6</sub> alkyl group, (c) a C<sub>2-6</sub> alkenyl group, (d) a C<sub>2-6</sub> alkynyl group, (e) a C<sub>3-10</sub> saturated, unsaturated, or aromatic carbocycle, and (f) a 3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein any of (b)–(f) optionally is substituted with one or more moieties selected from the group consisting of:

(aa) a carbonyl group, (bb) a formyl group, (cc) F, (dd) Cl, (ee) Br,

(ff) I, (gg) CN, (hh) NO<sub>2</sub>, (ii) -OR<sup>8</sup>,

 $(jj) -S(O)_p R^8$ ,  $(kk) -C(O)R^8$ ,  $(ll) -C(O)OR^8$ ,

 $(mm) - OC(O)R^8$ ,  $(nn) - C(O)NR^8R^8$ ,

(oo)  $-OC(O)NR^8R^8$ , (pp)  $-C(=NR^8)R^8$ ,

(qq) -C(R<sup>8</sup>)(R<sup>8</sup>)OR<sup>8</sup>, (rr) -C(R<sup>8</sup>)<sub>2</sub>OC(O)R<sup>8</sup>,

$$(ss) - C(R^8)(OR^8)(CH_2)_rNR^8R^8$$
,  $(tt) - NR^8R^8$ ,

(uu) 
$$-NR^8OR^8$$
, (vv)  $-NR^8C(O)R^8$ ,

$$(ww) - NR^8C(O)OR^8, (xx) - NR^8C(O)NR^8R^8,$$

$$(yy) - NR^8S(O)_rR^8, (zz) - C(OR^8)(OR^8)R^8,$$

(ab) 
$$-C(R^8)_2NR^8R^8$$
, (ac)  $=NR^8$ ,

$$(ad) - C(S)NR^8R^8$$
,  $(ae) - NR^8C(S)R^8$ ,

(af) 
$$-OC(S)NR^8R^8$$
, (ag)  $-NR^8C(S)OR^8$ ,

$$(ah) -NR^8C(S)NR^8R^8$$
,  $(ai) -SC(O)R^8$ ,

(aj) a  $C_{1-8}$  alkyl group, (ak) a  $C_{2-8}$  alkenyl group, (al) a  $C_{2-8}$  alkynyl group, (am) a  $C_{1-8}$  alkoxy group, (an) a  $C_{1-8}$  alkylthio group, (ao) a  $C_{1-8}$  acyl group, (ap)  $-CF_3$ ,

(aq) –SCF<sub>3</sub>, (ar) a C<sub>3-10</sub> saturated, unsaturated, or aromatic carbocycle, and (as) a 3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

alternatively,  $NR^6R^6$  forms a 3-10 membered saturated, unsaturated or aromatic ring including the nitrogen atom to which the  $R^6$  groups are attached wherein said ring is optionally substituted at a position other than the nitrogen atom to which the  $R^6$  groups are bonded, with one or more moieties selected from the group consisting of O,  $S(O)_p$ , N, and  $NR^8$ ;

alternatively, CR<sup>6</sup>R<sup>6</sup> forms a carbonyl group;

R<sup>7</sup>, at each occurrence, is selected from the group consisting of:

(a) H, (b) = O, (c) F, (d) Cl, (e) Br, (f) I, (g) 
$$-CF_3$$
,

(h) 
$$-\text{CN}$$
, (i)  $-\text{N}_3$  (j)  $-\text{NO}_2$ , (k)  $-\text{NR}^6(\text{CR}^6\text{R}^6)_t\text{R}^9$ , (l)  $-\text{OR}^9$ , (m)  $-\text{S(O)}_p\text{C}(\text{R}^6\text{R}^6)_t\text{R}^9$ ,

$$(n) - C(O)(CR^6R^6)_tR^9, (o) - OC(O)(CR^6R^6)_tR^9, (p) - SC(O)(CR^6R^6)_tR^9, (q) -$$

$$C(O)O(CR^6R^6)_tR^9$$
, (r)  $-NR^6C(O)(CR^6R^6)_tR^9$ , (s)  $-C(O)NR^6(CR^6R^6)_tR^9$ , (t)  $-$ 

$$C(=NR^6)(CR^6R^6)_tR^9$$
, (u)  $-C(=NNR^6R^6)(CR^6R^6)_tR^9$ , (v)  $-$ 

$$C(=NNR^6C(O)R^6)(CR^6R^6)_tR^9, (w) - C(=NOR^9)(CR^6R^6)_tR^9, (x) -$$

$$NR^6C(O)O(CR^6R^6)_tR^9$$
, (y)  $-OC(O)NR^6(CR^6R^6)_tR^9$ , (z)  $-$ 

$$NR^6C(O)NR^6(CR^6R^6)_tR^9$$
, (aa)  $-NR^6S(O)_p(CR^6R^6)_tR^9$ , (bb)  $-$ 

$$S(O)_pNR^6(CR^6R^6)_tR^9$$
, (cc)  $-NR^6S(O)_pNR^6(CR^6R^6)_tR^9$ , (dd)  $-NR^6R^6$ , (ee)  $-$ 

Docket No.: 26505-514 NATLUS

NR<sup>6</sup>(CR<sup>6</sup>R<sup>6</sup>), (ff) –OH, (gg) –NR<sup>6</sup>R<sup>6</sup>, (hh) –OCH<sub>3</sub>, (ii) –S(O)<sub>p</sub>R<sup>6</sup>, (jj) –NC(O)R<sup>6</sup>, (kk) a C<sub>1-6</sub> alkyl group, (ll) a C<sub>2-6</sub> alkenyl group, (mm) a C<sub>2-6</sub> alkynyl group, (nn) – C<sub>3-10</sub> saturated, unsaturated, or aromatic carbocycle, and (oo) 3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, wherein any of (kk)–(oo) optionally is substituted with one or more R<sup>9</sup> groups;

alternatively, two  $R^7$  groups may form  $-O(CH_2)_uO-$ ;  $R^8$  is selected from the group consisting of:

(a) R<sup>5</sup>,(b) H, (c) a C<sub>1-6</sub> alkyl group, (d) a C<sub>2-6</sub> alkenyl group, (e) a C<sub>2-6</sub> alkynyl group, (f) a C<sub>3-10</sub> saturated, unsaturated, or aromatic carbocycle, (g) a 3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, (h) –C(O)–C<sub>1-6</sub> alkyl, (i) –C(O)–C<sub>1-6</sub> alkenyl, (j) –C(O)–C<sub>1-6</sub> alkynyl, (k) –C(O)–C<sub>3-10</sub> saturated, unsaturated, or aromatic carbocycle, and (l) –C(O)–3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein any of (c)–(k) optionally is substituted with one or more moieties selected from the group consisting of: (aa) H, (bb) F, (cc) Cl, (dd) Br, (ee) I, (ff) CN, (gg) NO<sub>2</sub>, (hh) OH, (ii) NH<sub>2</sub>, (jj) NH(C<sub>1-6</sub> alkyl), (kk) N(C<sub>1-6</sub> alkyl)<sub>2</sub>, (ll) a C<sub>1-6</sub> alkoxy group, (mm) an aryl group, (nn) a substituted aryl group, (oo) a heteroaryl group, (pp) a substituted heteroaryl group, and qq) a C<sub>1-6</sub> alkyl group optionally substituted with one or more moieties selected from the group consisting of an aryl group, a substituted aryl group, a heteroaryl group, a substituted heteroaryl group, F, Cl, Br, I, CN, NO<sub>2</sub>, CF<sub>3</sub>, SCF<sub>3</sub> and OH;

R<sup>9</sup>, at each occurrence, independently is selected from the group consisting of:

(a)  $R^{10}$ , (b) a  $C_{1-6}$  alkyl group, (c) a  $C_{2-6}$  alkenyl group, (d) a  $C_{2-6}$  alkynyl group, e) a  $C_{3-10}$  saturated, unsaturated, or aromatic carbocycle, and f) a 3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein any of (b)–(f) optionally is substituted with one or more R<sup>10</sup> groups;

R<sup>10</sup>, at each occurrence, independently is selected from the group consisting of:

(a) H, (b) =O, (c) F, (d) Cl, (e) Br, (f) I, (g) 
$$-CF_3$$
, (h)  $-CN$ , (i)  $-NO_2$ , (j)  $-NR^6R^6$ ,

$$\text{(k)} - OR^6, \text{(l)} - S(O)_p R^6, \text{(m)} - C(O)R^6, \text{(n)} - C(O)OR^6, \text{(o)} - OC(O)R^6, \text{(p)}$$

$$NR^6C(O)R^6$$
, (q)  $-C(O)NR^6R^6$ , (r)  $-C(=NR^6)R^6$ , (s)  $-NR^6C(O)NR^6R^6$ , (t)  $-$ 

$$NR^6S(O)_pR^6, \, (u) \, -S(O)_pNR^6R^6, \, (v) \, -NR^6S(O)_pNR^6R^6, \, (w) \, a \, C_{1\text{-}6} \, alkyl \, \, group,$$

(x) a  $C_{2-6}$  alkenyl group, (y) a  $C_{2-6}$  alkynyl group, (z) a  $C_{3-10}$  saturated, unsaturated, or aromatic carbocycle, and (aa) a 3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein any of (w)–(aa) optionally is substituted with one or more moieties selected from the group consisting of  $R^6$ , F, Cl, Br, I, CN, NO<sub>2</sub>, –  $OR^6$ , –NH<sub>2</sub>, –NH(C<sub>1-6</sub> alkyl), –N(C<sub>1-6</sub> alkyl)<sub>2</sub>, a C<sub>1-6</sub> alkoxy group, a C<sub>1-6</sub> alkylthio group, and a C<sub>1-6</sub> acyl group;

R<sup>11</sup> each occurrence, independently is selected from the group consisting of:

- (a) a carbonyl group, (b) a formyl group, (c) F, (d) Cl, (e) Br, (f) I, (g) CN, (h)
- $NO_{2}$  (i)  $OR^{8}$ , (j)  $-S(O)_{D}R^{8}$ , (k)  $-C(O)R^{8}$ , (l)  $-C(O)OR^{8}$ ,
- $(m) OC(O)R^8, (n) C(O)NR^8R^8, (o) OC(O)NR^8R^8,$
- $(p) C = NR^8 R^8, (q) C(R^8)(R^8)OR^8, (r) C(R^8)_2OC(O)R^8,$
- $(s) C(R^8)(OR^8)(CH_2)_tNR^8R^8$ ,  $(t) NR^8R^8$ ,  $(u) NR^8OR^8$ ,
- $(v) NR^8C(O)R^8, (w) NR^8C(O)OR^8, (x) NR^8C(O)NR^8R^8, (y) NR^8S(O)_rR^8, (z) NR^8C(O)R^8 + ($

 $-C(OR^8)(OR^8)R^8$ , (aa)  $-C(R^8)_2NR^8R^8$ , (bb)  $=NR^8$ , (cc)  $-C(S)NR^8R^8$ , (dd) -

NR<sup>8</sup>C(S)R<sup>8</sup>, (ee) -OC(S)NR<sup>8</sup>R<sup>8</sup>, (ff) -NR<sup>8</sup>C(S)OR<sup>8</sup>, (gg) -NR<sup>8</sup>C(S)NR<sup>8</sup>R<sup>8</sup>, (hh) -

SC(O)R<sup>8</sup>, (ii) a C<sub>1-8</sub> alkyl group, (jj) a C<sub>2-8</sub> alkenyl group, (kk) a C<sub>2-8</sub> alkynyl

group, (ll) a C<sub>1-8</sub> alkoxy group, (mm) a C<sub>1-8</sub> alkylthio group, (nn) a C<sub>1-8</sub> acyl

group, (oo) a C<sub>3-10</sub> saturated, unsaturated, or aromatic carbocycle, and (pp) a 3-10

membered saturated, unsaturated, or aromatic heterocycle containing one or more

heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein (ii)-(kk) optionally are substitued with one or more R<sup>5</sup> groups;

R<sup>12</sup> is selected from the group consisting of:

(a) H, (b) a C<sub>1-6</sub> alkyl group, (c) a C<sub>2-6</sub> alkenyl group, (d) a C<sub>2-6</sub> alkynyl group, (e) –C(O)R<sup>5</sup>, (f) –C(O)OR<sup>5</sup>, (g) –C(O)–NR<sup>4</sup>R<sup>4</sup>R<sup>4</sup>R<sup>4</sup>, (h) –C(S)R<sup>5</sup>, (i) –C(S)OR<sup>5</sup>, (j) – C(O)SR<sup>5</sup>, (k) –C(S)-NR<sup>4</sup>R<sup>4</sup>R<sup>4</sup>R<sup>4</sup>, (l) a C<sub>3-10</sub> saturated, unsaturated, or aromatic carbocycle, or (m) a 3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, (n) a –(C<sub>1-6</sub> alkyl) –C<sub>3-10</sub> saturated, unsaturated, or aromatic carbocycle, or (o) a –(C<sub>1-6</sub> alkyl)-3-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, wherein (a)–(d) and (l)–(o) optionally are substitued with one or more R<sup>5</sup> groups;

p at each occurrence is 0, 1, or 2; r at each occurrence is 0, 1, or 2; t at each occurrence is 0, 1, or 2; u at each occurrence is 1, 2, 3, or 4; provided that when the compound has formula I and T is

D is not a single bond or a  $-CH_2-[[,]]$ .

2. (Currently Amended) A compound according to claim 1, having the formula:

or a pharmaceutically acceptable salt, or ester thereof-wherein T, D, E, F, G, R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> are as described in claim 1.

3. (Currently Amended) A compound according to claim 2 having the formula:

or a pharmaceutically acceptable salt, or ester thereof—wherein T, D, E, F, G, R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> are as described in claim 1.

4. (Currently Amended) A compound according to claim 2 having the formula:

or a pharmaceutically acceptable salt, or ester thereof-wherein T, D, E, F, G, R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> are as described in claim 1.

- 5. (Canceled).
- 6. (Previously Presented) A compound according to claim 1 or a pharmaceutically

acceptable salt, or ester thereof wherein G is B'.

7. (Previously Presented) A compound according to claim 6 or a pharmaceutically acceptable salt, or ester thereof wherein B' is selected from the group consisting of: (a) an aryl group, (b) a heteroaryl group, (c) a biaryl group, and (d) a fused bicyclic or tricyclic unsaturated or aromatic ring system optionally containing one or more carbonyl groups and one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, wherein each (a)-(d) optionally is substituted with one or more R<sup>11</sup> groups.

## 8. - 13. (Canceled).

14. (Currently Amended) A compound according to claim 1, wherein T is a macrolide selected from the group consisting of:

or a pharmaceutically acceptable salt, or ester thereof, wherein M,  $R^{100}$ ,  $R^{101}$ ,  $R^{104}$ ,  $R^{105}$ ,  $R^{106}$ ,  $R^{106}$ ,  $R^{107}$ ,  $R^{108}$ ,  $R^{109}$ ,  $R^{110}$ , and  $R^{120}$  are as described in claim-1.

15. (Currently Amended) A compound according to claim 1, wherein T is a macrolide selected from the group consisting of:

or a pharmaceutically acceptable salt, or ester thereof,

wherein M,  $R^{100}$ ,  $R^{101}$ ,  $R^{102}$ ,  $R^{104}$ ,  $R^{109}$ ,  $R^{114}$ ,  $R^{126}$  and  $R^{127}$  are as described in claim 1.

16. (Currently Amended) A compound according to claim 1, wherein T is a macrolide selected from the group consisting of:

or a pharmaceutically acceptable salt, or ester thereof,

wherein M,  $R^1$ ,  $R^2$ ,  $R^{104}$ ,  $R^{114}$ ,  $R^{109}$  and  $R^{127}$  are as described in claim 1.

17. (Previously Presented) A compound according to claim 1, wherein T is a macrolide selected from the group consisting of T1, T2, T3, T4, T11, T12, T13, T14, T15, T16, T17, T18, T19, T20, T21, T23, T24, T25, T26, T27, T28, T29, T30, T31, T32, and T33:

.\_\_O-CH₃

T25

HO

T23

.\_\_O-CH₃

\_\_\_\_O-CH₃

T24

T32

T33

or a pharmaceutically acceptable salt, or ester thereof.

T31

- 18. (Previously Presented) A compound having the structure corresponding to any one of the structures listed in Table 1 or 13 selected from structure 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 601, 608, 610, 612, 613, 615, 620, 621, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 742, 743, 744, 745, and 749 or a pharmaceutically acceptable salt, or ester thereof.
- 19. (Previously Presented) A pharmaceutical composition comprising a compound according to claim 1 and a pharmaceutically acceptable carrier.
- 20. (Previously Presented) A method for treating a bacterial infection in a mammal comprising administering to a mammal in need thereof an effective amount of a compound according to claim 1.

## 21. - 35. (Canceled).

- 36. (Previously Presented) The method according to claim 20 wherein the compound is administered orally, parentally, or topically.
  - 37. (Canceled)
- 38. (Previously Presented) A medical device containing a compound according to claim 1.
- 39. (Previously Presented) The medical device according to claim 38, wherein the device is a stent.